

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
14 December 2000 (14.12.2000)

PCT

(10) International Publication Number  
WO 00/75205 A1(51) International Patent Classification<sup>7</sup>: C08F 220/04, 220/12, C08G 18/72, 18/28, C08F 290/06

(21) International Application Number: PCT/US00/15754

(22) International Filing Date: 8 June 2000 (08.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/138,086 8 June 1999 (08.06.1999) US

(71) Applicant (for all designated States except US): UNION CARBIDE CHEMICALS &amp; PLASTICS [US/US]; Technology Corporation, 39 Old Ridgebury Road, Danbury, CT 06817-0001 (US).

(71) Applicants and

(72) Inventors: VANDEZANDE, Gerald, A. [CA/US]; 1221 Shincliffe Court, Cary, NC 27511 (US). OLESEN, Keith, R. [CA/US]; 300 Carpenter Town Lane, Morrisville, NC 27560 (US).

(74) Agent: PACCIONE, Stanley, J.; Union Carbide Chemicals &amp; Plastics, Technology Corporation, 39 Old Ridgebury Road, Danbury, CT 06817-0001 (US).

(81) Designated States (national): AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ZA.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

## Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 00/75205 A1

(54) Title: WATERBORNE THICKENERS AND DISPERSANTS HAVING IMPROVED CHEMICAL RESISTANCE

(57) Abstract: Improved dispersants and thickeners for use with latex polymers are disclosed which are polymerized from monomers having crosslinking functionality or elevated levels of macromonomers, or both. Latex polymers suitable for use with the thickeners and dispersants of the present invention can be prepared by a two stage polymerization of a first stage polymer and a second stage polymer wherein a monomer having crosslinking functionality is included in either the first stage polymer, the second stage polymer, or both.